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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,401	05/14/2007	Lukas Doerr	1406/385	8752
25297 7590 02/25/2008 JENKINS, WILSON, TAYLOR & HUNT, P. A. 3100 TOWER BLVD., Suite 1200 DURHAM, NC 27707				
EXAMINER				
MAL LAM T				
ART UNIT		PAPER NUMBER		
2819				
MAIL DATE		DELIVERY MODE		
02/25/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/590,401

Applicant(s)

DOERRER ET AL.

Examiner

LAM T. MAI

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2007.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,4-6,10 and 11 is/are rejected.
7) ☒ Claim(s) 2,3,7-9 and 12-21 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SI/08)
Paper No(s)/Mail Date 9/2006
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

Claims 1-21 are objected to because of the following informalities: Request all identifiers in every single claims (such as (100), (ZA), (2), (4), (U0U6), etc) be deleted. The reason is all the identifiers in the claim has no meaning but create a lot of confusing and a lot of potential 112 problems to the claims. Appropriate correction is required.

Claim 8 is objected to because of the following informalities: the word "equidistant" at the end of the claim is not understandable. Appropriate correction is required.

Claims 1 & 10 are objected to because of the following informalities: beginning of line 11, ADD "wherein". Appropriate correction is required.

Claims 2 & 3 & 4 & 6 & 7 & 8 & 9 & 12 & 13 & 14 & 15 & 16 & 17 & 18 & 19 & 20 are objected to because of the following informalities: REPLACE "characterized" with "wherein" for more compliance and clarification. DELETE "in that" Appropriate correction is required.

Claims 4 & 11 & 21 are objected to because of the following informalities:
REPLACE "characterized" with "further comprising". DELETE "in that provision is made of " Appropriate correction is required.

Claim 20 is objected to because of the following informalities: "the bit of the compensation" limitation is indefinite. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-6 and 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Melanson (USP 6,346,898).

Regarding claim 1, Melanson discloses in figures 4 & 5 that teaches input (102), output (110), summing device (105), filter (101), DAC (104) and clock quantizer (404) and the detail of the quantizer discloses in figure 5 (see column 1 to column 3).

Regarding claims 4-6, Melanson teaches in figure 5 a switching controller (516) which would including a memory and the controller coupled to the memory for switching references potential to the comparators (510) (see column 1 – column 3).

Regarding claim 10, Melanson discloses in figures 4 & 5 that teaches input (102), output (110), summing device (105), filter (101), DAC (104) and clock quantizer (404) and the detail of the quantizer discloses in figure 5 (see column 1 to column 3).

Regarding claim 11, Melanson teaches in figure 5 a switching controller (516) for switching references potential to the comparators (510) (see column 1 – column 3).

Claims 1, 4-6 and 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuang (USP 6,642,873).

Regarding claim 1, Kuang discloses in figures 4-6 that teaches input, output, summing device (101), filter (102), DAC (104) and clock quantizer (103) and the detail of the quantizer discloses in figures 5-6 (see description of figures 5-6).

Regarding claims 4-6, Kuang teaches in figures 5-6 a switching controller (503 and 504) which would including a memory and the switching controller coupled to the memory for switching references potential to the comparators (501) (see description of figures 5-6).

Regarding claim 10, Kuang discloses in figures 4-6 that teaches input, output, summing device (101), filter (102), DAC (104) and clock quantizer (103) and the detail of the quantizer discloses in figures 5-6 (see description of figures 5-6).

Regarding claim 11, Kuang teaches in figures 5-6 a switching controller (503 and 504) switching references potential to the comparators (501) (see description of figures 5-6).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAM T. MAI whose telephone number is (571)272-1807. The examiner can normally be reached on 5:30 am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Barnie Rexford can be reached on (571) 272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LAM T MAI/
Primary Examiner, Art Unit 2819